CLAIMS

1 - Disc prosthesis for cervical vertebrae comprising:

- a first (**2**) and a second plate (**3**) intended to be fixed on neighbouring cervical vertebrae,

- and means of articulation (**7**) inserted between the two plates placed in superimposed position,

characterised in that the means of articulation (**7**) comprise:

- means authorising flexion-extension movements in the sagittal plane (**S**) according to an angular clearance limited by means of stop in flexion-extension (**9**),

- means authorising lateral inflexion movements in a plane perpendicular to the sagittal plane (**S**) according to an angular clearance limited by means of stop in lateral inflexion (**12**),

- means authorising relative rotation movements between the first (**2**) and second (**3**) plates according to an angular clearance limited by means of stop in relative rotation,

- means of assembly (**17**) with the first (**2**) and second (**3**) plates so as to form a prosthesis consisting of a single piece.

2 - Disc prosthesis according to claim 1, characterised in that the means of articulation (**7**) comprise:

- a hole (**20**) with a partially spherical profile established inside a chamber (**21**) prepared in a plate,

- and a bearing surface (**23**) with a profile complementary to the hole (**20**) formed in the other plate and assembled in the hole (**20**) to be locked in the latter.

3 - Disk prosthesis according to claims 1 and 2, characterised in that the means authorising flexion-extension movements comprising an axis (**31**) extend in the sagittal plane (**S**) by protruding on both sides of the bearing surface, in the clearances (**32**) prepared in the second plate by opening in the spherical hole.

4 - Disk prosthesis according to claim 3, characterised in that the clearances (**32**) have a determined diameter to enable definition of the angular clearance of the relative rotation movements between the first and second plates.

5 - Disk prosthesis according to claim 1, characterised in that the means of stop in relative rotation are formed by a female geometric shape (**40**) co-operating with a complementary male geometric shape (**41**), one of the geometric shapes being prepared on the first plate while the second geometric shape is prepared on the second plate.

6 - Disk prosthesis according to claim 1, characterised in that the means of stop in lateral inflexion (**12**) are formed by the profile of the plates coming into contact with each other.

7 - Prosthesis according to claim 2, characterised in that the bearing surface (**23**) is prepared in a first insert (**25**) assembled on the first plate (**2**) and made in the shape of a stub and that the hole (**20**) is prepared in the second insert (**26**) assembled on the second plate (**3**) and made in the shape of a ring.

8 - Disk prosthesis according to claim 7, characterised in that the inserts (**25, 26**) are made of ceramic or metal.